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(54) Title: HYDROGEN STORAGE MATERIAL WITH HIGH STORAGE CAPACITY

(57) Abstract: Disclosed is a hydrogen storage material comprising a magnesium hydride. Said magnesium is stabilized in the fluorite structure. Preferably, the magnesium is at least partly substituted by an element such that the magnesium hydride is stabilized in the fluorite structure. In an advantageous embodiment, the hydrogen storage material also comprises a catalytically active material. Furthermore, an electrochemically active material, as well as an electrochemical cell comprising the above hydrogen storage material are disclosed.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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**B. FIELDS SEARCHED**

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 328 821 B1 (YOUNG ROSA T ET AL) 11 December 2001 (2001-12-11) claims 1-31	1-11
A	US 2002/122981 A1 (JANNER ANNA-MARIA ET AL) 5 September 2002 (2002-09-05) claims 1-13	1-11
A	US 2002/141939 A1 (GUAY DANIEL ET AL) 3 October 2002 (2002-10-03) claims 1-18	1-11

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Patent family members are listed in annex.

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